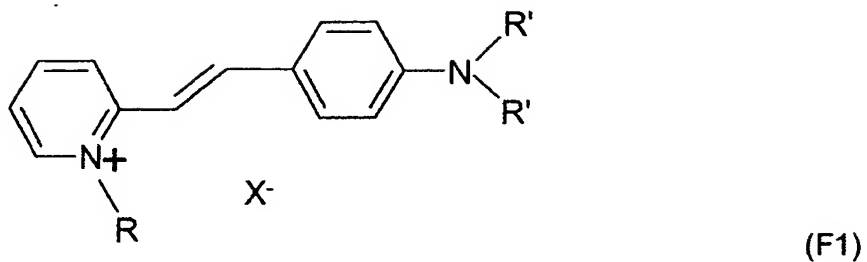
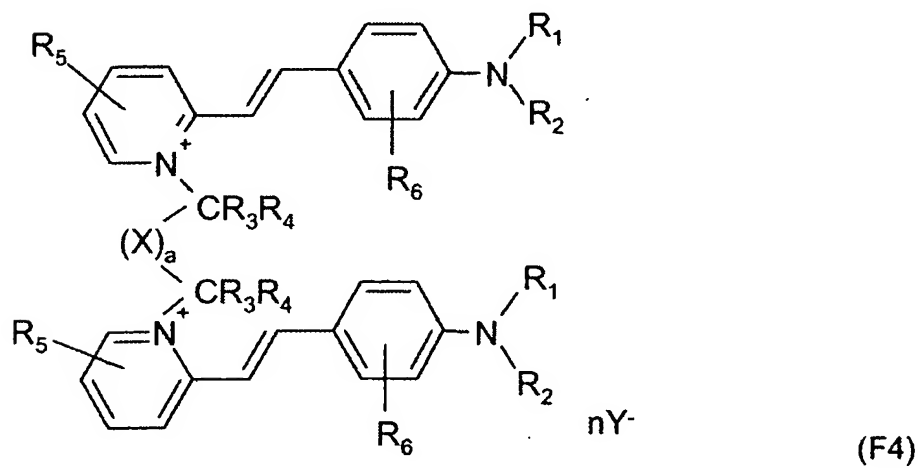
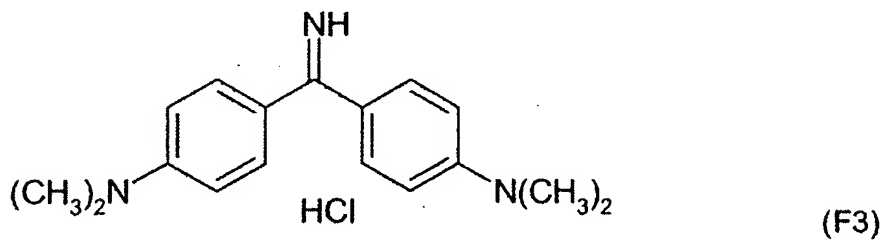
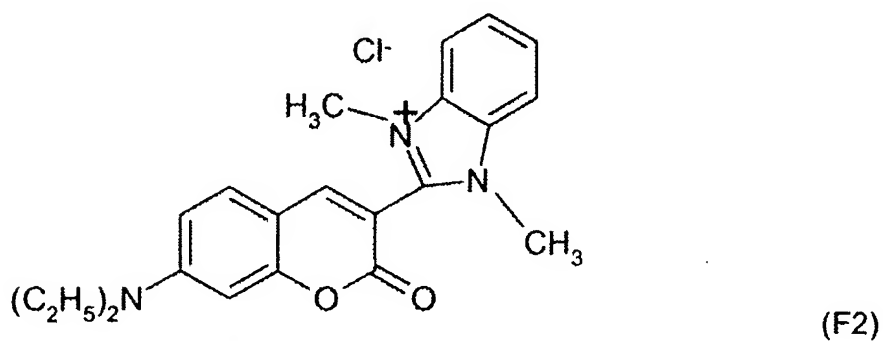


**WHAT IS CLAIMED IS:**

1. A process for dyeing, with a lightening effect, human keratin fibers that have previously been subjected to a permanent reshaping process, comprising:
  - a) applying to said keratin fibers at least one composition comprising, in a cosmetically acceptable medium, at least one fluorescent dye that is soluble in the medium;
  - b) leaving the at least one composition on the keratin fibers to act for a time period sufficient to develop desired coloration and lightening;
  - b) optionally rinsing the keratin fibers;
  - c) optionally washing the keratin fibers with shampoo and optionally rinsing the keratin fibers; and
  - d) drying or leaving to dry the keratin fibers.
2. The process according to Claim 1, wherein the at least one fluorescent dye has a reflectance maximum in the wavelength range of from 500 nm to 650 nm.
3. The process according to Claim 2, wherein the at least one fluorescent dye has a reflectance maximum that is in the wavelength range of from 550 nm to 620 nm.
4. The process according to Claim 1, wherein the at least one fluorescent dye is chosen from dyes in the orange range.
5. The process according to Claim 1, wherein the at least one fluorescent dye is chosen from naphthalimides; cationic and non-cationic coumarins; xanthenodiquinolizines; azaxanthenes; naphtholactams; azlactones; oxazines; thiazines; dioxazines; and azo, azomethine and methine monocationic and polycationic fluorescent dyes.
6. The process according to Claim 1, wherein the at least one fluorescent dye is chosen from the following compounds:



wherein R is chosen from methyl and ethyl radicals, R' is a methyl radical, and X<sup>-</sup> is chosen from anions;



wherein:

- R<sub>1</sub> and R<sub>2</sub>, which may be identical or different, are each chosen from:

- a hydrogen atom;
- linear and branched alkyl radicals comprising from 1 to 10 carbon atoms, wherein said alkyl radicals are optionally interrupted and/or substituted with at least one entity chosen from hetero atoms and from groups comprising at least one hetero atom and/or wherein said alkyl radicals are substituted with at least one halogen atom;
- aryl and arylalkyl radicals, wherein the aryl group comprises 6 carbon atoms and the alkyl group comprises from 1 to 4 carbon atoms, and wherein the aryl radical is optionally substituted with at least one alkyl radical chosen from linear and branched alkyl radicals comprising from 1 to 4 carbon atoms, wherein the at least one alkyl radical is optionally interrupted and/or substituted with at least one entity chosen from hetero atoms and from groups comprising at least one hetero atom and/or wherein the at least one alkyl radical is substituted with at least one halogen atom;
- R<sub>1</sub> and R<sub>2</sub> may optionally form, together with the nitrogen atom to which they are attached, a heterocycle and may comprise at least one other hetero atom, wherein the heterocycle is optionally substituted with at least one alkyl radical chosen from linear and branched alkyl radicals, wherein said at least one alkyl radical is optionally interrupted and/or substituted with at least one entity chosen from hetero atoms and from groups comprising at least one hetero atom and/or is substituted with at least one halogen atom; and
- R<sub>1</sub> or R<sub>2</sub> may optionally form, together with the nitrogen to which they are attached and one of the carbon atoms of the phenyl group bearing the

nitrogen atom, a heterocycle;

- R<sub>3</sub> and R<sub>4</sub>, which may be identical or different, are each chosen from a hydrogen atom and alkyl radicals comprising from 1 to 4 carbon atoms;
- R<sub>5</sub>, which may be identical or different, is chosen from a hydrogen atom, a halogen atom and linear and branched alkyl radicals comprising from 1 to 4 carbon atoms, optionally interrupted with at least one hetero atom;
- R<sub>6</sub>, which may be identical or different, is chosen from a hydrogen atom; a halogen atom; linear and branched alkyl radicals comprising from 1 to 4 carbon atoms, wherein the alkyl radicals are optionally substituted and/or interrupted with at least one entity chosen from hetero atoms and from groups bearing at least one hetero atom and/or wherein the alkyl radicals are substituted with at least one halogen atom;
- X is chosen from:
  - linear and branched alkyl radicals comprising from 1 to 14 carbon atoms and alkenyl radicals comprising from 2 to 14 carbon atoms, wherein the alkyl radicals and the alkenyl radicals are optionally interrupted and/or substituted with at least one entity chosen from hetero atoms and from groups comprising at least one hetero atom and/or wherein the radicals are substituted with at least one halogen atom;
  - 5- or 6-membered heterocyclic radicals optionally substituted with at least one alkyl radical chosen from linear and branched alkyl radicals comprising from 1 to 14 carbon atoms, wherein the at least one alkyl radical is optionally substituted with at least one entity chosen from hetero atoms; with linear and branched aminoalkyl radicals comprising from 1 to 4 carbon atoms, optionally substituted with at least one hetero atom; and/or with at least one halogen

atom;

- fused and non-fused aromatic and diaromatic radicals, optionally separated with at least one alkyl radical comprising from 1 to 4 carbon atoms, wherein the aromatic and diaromatic radicals are optionally substituted with at least one entity chosen from halogen atoms and alkyl radicals comprising from 1 to 10 carbon atoms, said alkyl radicals being optionally substituted and/or interrupted with at least one entity chosen from hetero atoms and groups bearing at least one hetero atom;
- a dicarbonyl radical; and
- wherein the group X possibly bears at least one cationic charge;

- a is equal to 0 or 1;

- Y<sup>-</sup>, which may be identical or different, is chosen from organic and mineral anions; and

- n is an integer equal to at least 2 and at most equal to the number of cationic charges present in the at least one fluorescent dye.

7. The process according to Claim 6, wherein, in formula (F1), X<sup>-</sup> is chosen from iodide, sulphate, and methosulphate anions.

8. The process according to Claim 7, wherein, in formula (F4), R<sub>1</sub> and R<sub>2</sub>, which may be identical or different, are each chosen from linear and branched alkyl radicals comprising from 1 to 4 carbon atoms.

9. The process according to Claim 8, wherein, in formula (F4), the heterocycle formed from R<sub>1</sub> and R<sub>2</sub> and the nitrogen to which they are attached, is optionally substituted with at least one alkyl radical chosen from linear and branched alkyl radicals comprising from 1 to 4 carbon atoms.

10. The process according to Claim 1, wherein the at least one fluorescent dye is

present in an amount ranging from 0.01% to 20% by weight, relative to the total weight of the at least one composition.

11. The process according to Claim 10, wherein the at least one fluorescent dye is present in an amount ranging from 0.05% to 10% by weight, relative to the total weight of the at least one composition.

12. The process according to Claim 11, wherein the at least one fluorescent dye is present in an amount ranging from 0.1% to 5% by weight, relative to the total weight of the at least one composition.

13. The process according to Claim 1, wherein the at least one fluorescent dye is soluble in the medium of the at least one composition to at least 0.001 g/l at a temperature ranging from 15 to 25°C.

14. The process according to Claim 13, wherein the at least one fluorescent dye is soluble in the medium of the at least one composition to at least 0.5 g/l at a temperature ranging from 15 to 25°C.

15. The process according to Claim 14, wherein the at least one fluorescent dye is soluble in the medium of the at least one composition to at least 1 g/l at a temperature ranging from 15 to 25°C.

16. The process according to Claim 15, wherein the at least one fluorescent dye is soluble in the medium of the at least one composition to at least 5 g/l at a temperature ranging from 15 to 25°C.

17. The process according to Claim 1, wherein the at least one composition further comprises at least one surfactant chosen from nonionic, anionic and amphoteric surfactants.

18. The process according to Claim 17, wherein the at least one surfactant is

present in an amount ranging from 0.01% to 30% by weight, relative to the total weight of the at least one composition.

19. The process according to Claim 1, wherein the at least one composition further comprises at least one additional non-fluorescent direct dye chosen from nonionic, cationic and anionic non-fluorescent direct dyes.

20. The process according to Claim 1, wherein the at least one additional non-fluorescent direct dye is chosen from nitrobenzene dyes, azo dyes, anthraquinone dyes, naphthoquinone dyes, benzoquinone dyes, phenothiazine dyes, indigoid dyes, xanthene dyes, phenanthridine dyes, phthalocyanin dyes, and triarylmethane-based dyes.

21. The process according to Claim 20, wherein the at least one additional non-fluorescent direct dye is present in an amount ranging from 0.0005% to 12% by weight, relative to the total weight of the at least one composition.

22. The process according to Claim 21, wherein the at least one additional non-fluorescent direct dye is present in an amount ranging from 0.005% to 6% by weight, relative to the total weight of the at least one composition.

23. The process according to Claim 1, wherein the at least one composition is provided in a form of a lightening dyeing shampoo.

24. The process according to Claim 1, comprising, before applying the at least one composition to the keratin fibers:

- a) applying at least one alkaline aqueous composition with a pH of at least 10 to the keratin fibers, while smoothing out the keratin fibers;
- b) leaving the at least one alkaline aqueous composition on the keratin fibers for a time period that is sufficient to shape the keratin fibers; and
- c) optionally rinsing the keratin fibers, washing the keratin fibers with shampoo,

rinsing the keratin fibers again, and optionally drying the keratin fibers.

25. The process according to Claim 1, comprising, before applying the at least one composition to the keratin fibers:

- a) applying at least one reducing composition comprising, in a cosmetically acceptable medium, at least one reducing agent to the keratin fibers;
- b) leaving the at least one reducing composition on the keratin fibers for a time period that is sufficient to shape them;
- c) rinsing the keratin fibers;
- d) applying at least one oxidizing composition;
- e) leaving the at least one oxidizing composition on the keratin fibers for a time period that is sufficient to fix the shape of the keratin fibers; and
- f) optionally rinsing the keratin fibers, washing the keratin fibers with shampoo, rinsed the keratin fibers and optionally drying the keratin fibers.

26. The process according to Claim 1, wherein the at least one composition is applied to hair with a tone height of less than or equal to 6.

27. The process according to Claim 26, wherein the at least one composition is applied to hair with a tone height of less than or equal to 4.

28. The process according to Claim 1, wherein the human keratin fibers are artificially dyed or pigmented.